IN THE CLAIMS

1. (currently amended): A light sensor for detecting entry of an object into a space, the light sensor comprising:

a light emitter and a light guide both located on a first side of said space;

a light receiver, located on a second side of said space, for receiving light emitted from said light guide; ~~emitter; and~~

said [[a]] light guide [[for]] taking in the light emitted from the light emitter, reflecting the taken-in light at a reflection portion ~~provided on a part thereof;~~ comprised in the light guide, and ejecting the light across the space toward the light receiver,

wherein the light guide is plate-shaped and comprises the reflection portion disposed on one of two opposing faces of the light guide having larger areas than the other faces thereof, and the light guide takes in the light through one end face thereof, reflects the taken-in light at the reflection portion, and ejects the reflected light from the other of the two opposing faces thereof; ~~light receiver and the light guide are disposed so as to be opposed to each other with an appropriate space in between, and~~

whereby entry of [[an]] the object into said space is detected based on the light received by the light receiver.

2. (canceled):

3. (currently amended): [[A]] The light sensor according to Claim [[2,]] 1, wherein the reflection portion ~~has a groove shape.~~ comprises a series of parallel grooves.

4. (currently amended): A light sensor for detecting a position of a reflective object in a space, the light sensor comprising:

a light emitter and a light guide both located on a first side of said space;

a light receiver, located on the first side of said space, for receiving light emitted from said light guide ~~emitter;~~ and reflected [[at a]] by the reflective object; and

said [[a]] light guide [[for]] taking in the light emitted from the light emitter, reflecting the taken-in light at a reflection portion ~~provided on a part thereof;~~ comprised in the light guide, and ejecting the light across the space toward the ~~light receiver;~~ reflective object;

wherein the light guide is plate-shaped and comprises the reflection portion disposed on one of two opposing faces of the light guide having larger areas than the other faces thereof, and the light guide takes in the light through one end face thereof, reflects the taken-in light at the reflection portion, and ejects the reflected light from the other of the two opposing faces thereof. ~~light receiver receives the light ejected from the light guide and reflected at the reflective object; and a~~

whereby the position of said reflective object is detected based on the light received by the light receiver.

5. (canceled)

6.(currently amended): [[A]] The light sensor according to Claim 4, wherein the reflection portion ~~has a groove shape.~~ comprises a series of parallel grooves.

7. (currently amended): A light sensor for detecting entry of an object into a space, the light sensor comprising:

a light emitter located on a first side of said space;

a light receiver, located on the second side of said space, for receiving light emitted from said light emitter; and

a light guide located on the second side of said space;

said [[a]] light guide [[for]] taking in the light emitted from the light emitter, reflecting the taken-in light at a reflection portion ~~provided on a part thereof,~~ comprised in the light guide, and ejecting the light toward the light receiver,

wherein the light guide is plate-shaped and comprises the reflection portion disposed on one of two opposing faces of the light guide having larger areas than the other faces thereof, and the light guide takes in the light through one end face thereof, reflects the taken-in light at the reflection portion, and ejects the reflected light from the other of the two opposing faces thereof. ~~light emitter and the light guide are disposed so as to be opposed to each other with an appropriate space in between, and~~

whereby entry of [[an]] the object into said space is detected based on the light received by the light receiver.

8. (canceled)

9. (currently amended): The light sensor according to Claim [[8,]] 7, wherein the reflection portion ~~has a groove shape.~~ comprises a series of parallel grooves.

10-16. (withdrawn)

17. (new): The light sensor according to claim 1, wherein an intensity of light ejected from a face of the light guide is substantially uniform over an entire area of the light ejecting face.

18. (new): The light sensor according to claim 4, wherein an intensity of light ejected from a face of the light guide is substantially uniform over an entire area of the light ejecting face.

19. (new): The light sensor according to claim 7, wherein an intensity of light ejected from a face of the light guide is substantially uniform over an entire area of the light ejecting face.

20. (new): The light sensor according to claim 1, wherein the two opposing faces of the light guide having larger areas than the other faces are parallel.

21. (new): The light sensor according to claim 4, wherein the two opposing faces of the light guide having larger areas than the other faces are parallel.

22. (new): The light sensor according to claim 7, wherein the two opposing faces of the light guide having larger areas than the other faces are parallel.